CMSY-217
Intermediate Java
Fall 2011
Course Syllabus

Instructor: Michael L. Miller
E-mail: mikemiller@howardcc.edu
Meeting Room: DH-321
Meeting Time: Th: 6:00 - 9:50 PM

Course Description: This course builds on the foundations from Introduction to Java and expands the coverage to more advanced topics. Topics include recursion, searching and sorting algorithms, data structures, Java Collections Framework, Generics, multithreading, network programming, JDBC, and Servlets/JSP. The Java 2D API and Swing Toolkit will also be presented. (3 Credits)

Prerequisite: CMSY-199

Textbook: Java How To Program, 8th Edition, by Paul Deitel and Harvey Deitel

Materials: USB Flash Drive

Teaching Methods: Classroom lectures, demonstrations, and student lab time.

Classroom Atmosphere: No eating or drinking in the classroom. Please silence your cell phone.

Grades: The course is based on a point system.
Programming Assignments - 100 pts. each
Tests - 200 pts. each

Your final grade will be computed by the formula:
Grade = ((Total Points Earned) / (Total Points Possible)) * 100%

Letter grades will be assigned as follow:
A = 90 - 100% B = 80 - 89% C = 70 - 79% D = 60 - 69% F = Below 59%

Turning in Assignments: Assignments will be submitted electronically using the Canvas course website on or before the due date.

Late Assignments: Late assignments are not accepted.

Make-up Tests: Make up tests are given only when verifiable emergencies prevent you from being in class on test day. You must contact me as soon as possible and no later than before the next class meeting after the test day to schedule a make-up.

Attendance: Class attendance is required. If you miss a class, you are responsible for the material that was covered (including any assignments/tests) on that day.

Contact: Please contact me by email if you have any questions. I will strive to give you a response within 24 hours.

Upon completion of this course, the student will be able to:

1. Demonstrate an understanding of recursion.
2. Demonstrate an understanding of searching and sorting algorithms and be able to determine their efficiency.
3. Use the data structure implementations in the Java Collections Framework.
4. Create and utilize custom data structures such as linked lists, queues, stacks, and binary trees.
5. Write generic methods and classes.
6. Use the Java 2D API to display graphics.
7. Develop GUI applications using the Swing toolkit and handle generated events.
8. Use the Thread class and Runnable interface to write multithreaded code.
9. Write Java networking applications using sockets.
10. Use the JDBC API to access databases.
11. Create dynamic web content using the Servlet/JSP API.

Academic honesty, as defined in the student handbook, is required of all students.

Please review HCC's Academic Standards Policy in the student handbook.
http://www.howardcc.edu/students/academic_support_services/retention_services/academ_stand_appeal.htm

Schedule:
The following is a tentative schedule that is subject to change:

Date	Class Activity	Topic
Sep. 1	Ch. 18	Recursion
Sep. 8	Ch. 19	Searching and Sorting
Sep. 15	Ch.20	Collections
Sep. 22	Ch. 21	Generic Classes and Methods
Sep. 29	Ch. 22	Custom Data Structures
Oct. 6	Ch. 15	Java 2D
Oct. 13	Ch. 25	GUI Components
Oct. 20	Midterm, Ch. 26	
Oct. 27	Ch. 26	Multithreading
Nov. 3	Ch.27	Networking
Nov. 10	Ch. 28	JDBC
Nov. 17	Ch. 29	Web Applcations
Nov. 24	Thanksgiving Break	
Dec. 1	http://www.coreservlets.com	Servlets/JSP
Dec. 8	http://developer.android.com	Android SDK
Dec. 15	Final Exam	DH-321, 6-8 pm

Division Outcomes: The following outcomes are instilled in various courses throughout each associate degree program in the Business and Computer Systems Division. By completion of a program, each graduate of the Division is expected to have achieved these outcomes. They serve as the basis for transfer to a baccalaureate program and functioning in a business career.

1. Engage in an actual business setting (real-time, real-life experience) in order to develop a practical understanding of how to function within that setting.
2. Communicate effectively and deliver professional oral and written presentation(s) in various business settings.
3. Operate in an ethical, professional manner consistent with the career field.
4. Function in an up-to-date technological environment, consistent with the chosen career field.
5. Demonstrate understanding of financial foundations of business operations.
6. Demonstrate the ability to think critically (problem-solve, be creative, make decisions).
7. Function as a team member and leader in a cooperative and goal-directed manner.
8. Use accepted data-gathering and analysis techniques.
9. Incorporate awareness of global impacts on commerce and business.
10. Demonstrate an openness to change and be able to function in an environment of change.